FESSENDEN'S

SILK MANUAL,

AND

PRACTICAL FARMER.

Devoted to the Culture of Silk, Agriculture, and Rural Economy.

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BOSTON, SEPTEMBER, 1835.

FACTS AND OBSERVATIONS RELATIVE TO THE CULTURE OF SILK.

SILK AS A NON-CONDUCTOR OF ELECTRICITY AND A HEALTHY ARTICLE OF APPAREL.—It is well known that electricity is a very powerful as well as mysterious agent; and it is believed to be true that a certain proportion of that extremely subtle, and generally invisible fluid, is as necessary to good health as air to animal life. When there is a want of a due supply of electricity in our bodies, we are languid, low spirited, and suffer under a sort of *tedium vitæ*, (weariness of life,) which is quite as insupportable as actual and acute pain. When these feelings occur, we complain of hypochondria, and a want of energy, mental and corporeal — the world seems a blank, and existence a burthen. We do not suspect, what is most commonly the case, that a damp atmosphere is every moment robbing us of *electricity*, by virtue of its powers as a conductor or carrier of that indispensable requisite to health and enjoyment.

In dry weather, whether the air be warm, or cold, we feel light and vigorous, because dry air being a slow conductor of electricity leaves us to enjoy its luxuries, and we are in what is called good spirits. But in wet weather, when

"Steep'd in continual rains, or with raw fogs
Bedew'd, our seasons droop; incumbered still
A pond'rous heav'n o'erwhelms the sinking soul;"

we feel oppressed and heavy as if we had suddenly become inmates of the "*Castle of Indolence*," where

——"Lethargy, with deadly sleep oppress,
Stretched on his back, a mighty lubbard, lies
Heaving his sides, and snoring night and day."

If, however, we can retain in the corporeal system in wet weather, the electricity which is the source, if not identical with animal spirits, that indescribable feeling of enjoyment which flows from vigorous health is ours in full extent. This can only be accomplished by keeping our bodies enclosed by non-conductors of the electric fluid. And the best non-conducting substance is silk, which is so excellent a barrier against the transmission of that subtle but mighty agent, that the most vivid and powerful discharge which ever emanated from Heaven's electrical apparatus, in the flash of lightning and the roar of thunder, cannot pass through a silk handkerchief of the slightest texture, provided it be thoroughly dry. Persons, therefore, of feeble animation, who are apt to become listless and low spirited in damp weather, will find silk waistcoats, drawers, and stockings, the most perfect, powerful and innocent of all cordials. Flannel will answer a similar purpose, but in a smaller degree. Wash-leather is also a non-conductor of electricity, and may be used by those who prefer it, but is more apt to be clogged by perspirable matter, issuing from the pores. Silk is, however, on every account the best; and those who are averse to the wearing of flannel next to the skin will find equal benefit by substituting cotton shirts, drawers and stockings, with silk over them; or where more heat is required, flannel between the cotton and silk, for the silk should always be outermost.

An English writer says—"Silk should be used in every possible way by the weak, in the linings

of sleeves, in the stiffenings of neck cloths, in the entire backs of surtouts, cloaks, mantles, and even in the coverlets of beds, &c. and where health is in question, it will be found to be the most economical stuff that can be used, as it will save many an apothecary's bill. When it can be made a principal means of preventing consumption, rheumatism, gout, inflammation, melancholy, madness, and even suicide itself, no expense ought to be spared."

General Directions to American Planters and Farmers for the Raising of Silk Worms, by J. D'Homergue.

[Concluded from our last.]

ON THE REARING OF SILK WORMS.

In Europe the silk worms, after they are hatched are generally laid, with the leaves on which they are feeding, on wicker hurdles, in order, as it is thought, the more easily to keep them clean. I think they may as well be laid on clean fine tables, and may in that manner also be kept clean, as I shall presently show.

During the first day after the worms are hatched, the room in which they are, should be kept in the same degree of heat; but afterwards, as the heat and the strength of the insect increases together, the room should be cooled from time to time by letting in a draught of air. In general the windows should be now and then opened to let in the dry air from the north and northwest. Dampness is fatal to the silk worm and should be constantly guarded against.

Cleanliness is also of the greatest importance; when it is wished to clean the table on which the worms are, it is only necessary to place close to it another table, on which are put mulberry leaves; the worms will immediately crawl to them, and leave the other table empty, which may then be cleaned. This is necessary to be done the oftener as they increase in size, as they make more ordure. In the beginning it should not be done until after their first moulting. They generally moult or shed their skin four times. During the moulting, which lasts 24 hours, they lie torpid, and do not feed. They should be left quiet.

Care should be taken that the worms do not lie on each other, as it prevents their feeding. When they do they should be separated. They should have as much space as possible; the more they are at their ease the better they thrive.

Nothing is more prejudicial to the silk worm than to be fed with damp leaves. A quantity of dry leaves should therefore always be kept in reserve in case of rain. Wet leaves must be dried in the hot sun. The leaves should not be gathered until the sun has absorbed the dew.

The quantity of food to be given to the worms must be calculated according to their ages. In the first days they should not be overfed.

In plucking the leaves to give to the worms, the buds should not be touched, nor the branches of the tree broken. Nothing but leaves should be gathered. The mulberry puts forth three times in each season: if the branches are broken, or the buds plucked off the tree suffers considerably, and does not produce so much. All the leaves should not be plucked off, but some left on the tree.

IV. OF THE RAISING OF THE SILK WORM.

When the silk worms are ready to make their cocoons, which in this country, generally, is on the 31st day after they have been hatched, a kind of artificial hedge not above one foot high must be prepared, by means of some brushwood without any leaves, which is to be fixed along the wall, behind the table on which the worms are. They crawl of themselves on this hedge, which is called *rising*, and there make their cocoons. This brushwood must not be fixed straight up along the wall but should be inclined above and below, in the form of a semicircle towards the table on which it is to rest, because the worms always move in a circular direction; and also in order that, if they should fall they may not fall upon the table or floor, but on some part of the artificial hedge, whence they may crawl up and carry on the work.

It is easy to know when the worms are ready to rise. They crawl on the leaves without eating them; they rear their heads as if in search of something to climb on; their rings draw in; the skin of their necks becomes wrinkled, and their body becomes like soft dough. Their color also changes to á pale yellow. When these signs appear, the table should be cleaned and the hedge prepared to receive them.

From the moment that the worms begin to rise they cease to eat; they must not be touched nor their cocoons, until they are pulled off as will be presently mentioned.

V. PICKING OFF THE COCOONS.

The worms generally form their cocoons in three days after rising; but they are not perfect until the sixth day, when they may be picked off from the hedge. In Europe this is not done till the eighth day, nor should it be done sooner in this country, if during the six days there have been violent thunder storms, by which the labors of the moth are generally interrupted. The cocoons must be taken down gently, and great care taken not to press hard on them; because, if in the least flattened, they fall into the class of imperfect cocoons, and are greatly lessened in value.

In picking the cocoons from the hedge, the floss or tow with which they are covered must be delicately taken off, always taking care not to press too hard on the cocoous. After the cocoons are thus taken down some are preserved for eggs, and others kept for sale.

VI. OF COCOONS FOR EGGS.

In order that the farmer may judge of the quantity of cocoons that it will be proper or advisable for him to put aside and preserve for eggs, it is right that he should be told that fourteen ounces of cocoons will produce one ounce of eggs, and one ounce eggs will produce a quintal [100 pounds] of cocoons.

In selecting the cocoon to be kept for eggs it is recommended to select the white ones in preference and keep the colored ones for sale; attention should be paid to having an equal number of males and females, and they are generally known by the following signs: the male cocoons, that is to say, those which contain the male insects are in general smaller than the *female*; they are somewhat depressed in the middle, as it were with a ring; they are sharp at one end, and sometimes at both, and hard at both ends; the female cocoons on the contrary, are larger than the male, round and full, little or not at all depressed in the middle, and not pointed at either end. They may easily be discerned by a little habit.

It is particularly recommended to take all off the floss or tow from these cocoous, so that the moth may find no difficulty in coming out.

After the cocoons are taken down from the hedge, those which are intended for eggs should be laid, but not crowded, on tables; that is to say, the males on one table and the females on another, that they may not copulate too soon, and before they have discharged a viscid humor, of a yellow reddish color, which prevents their fecundity. They discharge this humor in one hour after coming out of the cocoon, which is generally ten days after they have been taken down from the hedge; this may be accelerated by heat.

At the expiration of one hour after the moths have come out of their cocoons, the males and females may be put together on tables or on the floor; the tables or floor ought to be previously covered with linen or cloth, on which, after copulation, the females lay their eggs. One female moth or butterfly generally lays 500 eggs; the male and female remain about six hours together, during which time they copulate; after which they separate, and the female is 48 or 50 hours laying eggs; but the greatest quantity during the first 40 hours.

From the moment the moths have come out of their cocoons until the females have laid all their eggs, the room must be kept entirely dark; the light debilitates them and makes them produce but few eggs, and the worms that come from them are weak and puny.

When the female moths have done laying eggs, all the insects must be taken away, and may be given as food to the fowls. The eggs must remain on the cloth where they have been deposited during fifteen or twenty days, until they shall become of an ash or slate color, when they are perfectly ripe, and may be considered as good eggs. Then the cloth or linen must be folded, and kept in a cool and dry place, until it shall be thought proper to take off the eggs which is done by putting the cloth into pure water, and when thoroughly wetted, scraping gently the eggs from the cloth taking care not to injure them. When thus scraped into the water all the good eggs will go to the bottom, and the bad, if any, will swim at the top, as mentioned before, Art. 1.

The eggs being thus washed, must be dried in the open air, and when perfectly dry, the best

mode to preserve them is to put them into hollow reeds, or canes, perfectly dry, and closed at the two extremities with a thin piece of flaxen or cotton linen well fastened. It is also the best means to transport them from one place to another.

VII. OF COCOONS INTENDED FOR SALE.

In order to prevent the cocoons from being perforated by the moths escaping from them, which greatly lessens their value, it is necessary to kill the moths. This is generally done by baking in an oven or by steam, but the best mode, which is peculiarly well adapted to warm climates, is to lay the cocoons on linen or cotton sheets, but not too close, or one upon another, and to expose them thus to the heat of the sun in open air, when it is perfectly dry, during four days, from 11 A. M. to 4 P. M. taking great care in handling them not to crush or flatten them, which is of the highest importance. In that time there is no doubt that the moths will be killed. The processes of steaming and baking are not always safe, because they may be overdone and the silk greatly injured. I have seen instances of it in this country. Yet, if the weather should prove obstinately damp or rainy, those processes must be recurred to; but not in dry sunshiny weather, when they can be avoided.

The last thing to be spoken of is the packing of the cocoons to send to market. They should be put in boxes with great care, not pressed too close lest they should be flattened, and close enough that they should not suffer in like manner by striking hard upon each other in consequence of the motion of carriages or stages. The boxes being dry and well conditioned may be transported by steam boats; if transported by sea, they should not remain longer than fifteen days on salt water, lest they should become mouldy. On river water and particularly by steam boats, there is not the same danger. The boxes in every case should be covered with a tarpaulin or good oiled cloth, that they may in no case suffer from dampness or rain.

The price of good cocoons in France is from twentyfive to thirtyfive cents per pound of sixteen ounces—I mean of perfect cocoons. Perforated cocoons, from which the moth has escaped, those which are spotted, and the imperfect ones, called *chiques*, mentioned in the essay No. V. command no price, and are generally given away by the silk culturists. There are but few of them, because, those who raise silk worms being experienced in the business, produce hardly any but good cocoons. When these are sold, the bad ones are thrown into the bargain.

The price of cocoons in this country cannot yet be settled; but it will be the interest of the silk culturist to sell them in the beginning as cheap as possible, to encourage the silk manufacturers, which alone can procure them regular purchasers, and without which their produce must lie upon their hands. J. D'HOMERGUE.

MEDICAL AND OTHER VALUABLE PROPERTIES OF SILK.

In the British Annual Register, for 1829, vol. lxxi. it is stated, that "A silk covering of the texture of a common handkerchief, is said to possess the peculiar property of resisting the noxious influence, and neutralizing the effects of malaria (foul air from marshes). If, as is supposed, the poisonous matter is received into the system through the lungs, it may not be difficult to account for the action of this very simple preventive: it is well known that such is the nature of malaria poison, that it is easily decomposed by even feeble chemical agents. Now it is probable that the heated air proceeding from the lungs may form an atmosphere within the veil of silk, of power sufficient to decompose the miasma in its passage to the mouth; although it may be equally true that the texture of the silk covering may act mechanically as a non-conductor, and prove an impediment to the transmission of the deleterious substance."

If a silk veil will preserve against the deleterious effects of those exhalations, which, on the borders of our western lakes, and in many other parts of our country, produce ague and fever, silk would be worth more for that use alone than all the gold and jewels that ever glistened. Besides, if silk coverings for the head are efficacious to preserve against malaria, the presumption is, that they would guard against the foul air of sick chambers, where patients suffer under contagious diseases, and indeed against bad air of every kind and description. The more we examine the nature and

uses of silk, the stronger the inducements appear to engage the industry and ingenuity of the good people of these United States in the culture and manufacture of that precious article.

USES OF THE MULBERRY TREE.

The wood of the mulberry tree is used for many purposes. Its being compact, pliant, and hard, capable of receiving a good polish, causes it to be sought by upholsterers, turners, and carvers. Its strength makes it useful to the joiner, and its power of resisting the action of water almost as well as oak, makes it good timber for building boats. It is also a very good wood for fuel, and is well adapted for making charcoal.

Mayet sur le culture du Murier.

It was observed by Dr Deane, in 1793, that "The only mulberry in any degree proper for the food or successful culture of silk worms is the white mulberry. [The Chinese Mulberry, and some other sorts of mulberry, were not then known in this country.] All attempts to raise them on the common black mulberry will be unsuccessful."

The same writer observed, "If we are not disposed to make use of mulberry trees for the feeding of silk worms, they would pay for the trouble of rearing them by their fruit and timber."

It is much in favor of the culture of the mulberry tree, that its roots strike very deep into the ground, so that the surface not being impoverished as it is by many trees, whose roots are found more in the upper soil, other kinds of cultivation may be prosecuted around it. Neither its shade, nor the dropping of rain from its leaves, is considered prejudicial to plants growing beneath it. *

GRAND SILK MACHINERY.

Mr Lambe, of Derby, Eng. having, in the disguise of a common workman, succeeded in taking accurate drawings of silk-throwing machinery in Piedmont, erected a stupendous mill for that purpose on the river Derwent at Derby, and obtained a patent for the sole and exclusive property in the same during the space of fourteen years. This grand machine was constructed with 26,586 wheels, and 97,746 movements, which worked 73,726 yards of organzine silk thread with every revolution of the water wheel whereby the machinery was actuated; and as this revolved three times in each minute, the almost inconceivable quantity of 318,504,960 yards of organzine could be produced daily. Only one water wheel was employed to give motion to the whole of this machinery, the contrivance of which speaks highly for that of the constructor, who possessed the means of controlling and stopping any one or more of the movements at pleasure, without obstructing the continued action of the rest. The building wherein this machinery was erected was of great extent, being five stories in height, and occupying one-eighth of a mile in length. So long a time was occupied in the construction of this machinery, and so vast was the outlay which it occasioned, that the original duration of the patent proved insufficient for the adequate remuneration of its ensurprising founder, who, on these grounds, applied to parliament for an extension of the term for which his privilege had been granted. This, however, in consideration of the great national importance of the object, which was opposed to its continued limitation in the hands of any individual, was not granted; but parliament voted the sum of 14,000 pounds to Sir Thomas Lambe, as some consideration for the eminent service rendered by him to the nation, in discovering and bringing to perfection, at great expense, a work so beneficial to the kingdom; the grant being made on the sole condition, that competent persons should be allowed to execute an exact model of the machinery, to be deposited in such a place as his Majesty should appoint, in order to perpetuate the manufacture.

SILK-THROWING MILL.

In a throwing mill (or manufactory in which raw silk is prepared for the weaver) situated in the neighborhood of London, there are 1600 swifts employed, with a proportionate number of spindles. These are all put in motion by a steam engine, on the high pressure principle, of six horse power, having a boiler of capacity equal to the production of steam for an engine of double that force. The surplus steam is employed in warming and drying the factory. In the establishment, which is very carefully and ably conducted, are employed 120 people, mostly young girls, and the

* Dr Lardner.

quantity of silk thrown during the whole year, the works being constantly employed, is about 13,000 pounds' weight. The weekly performance varies somewhat, according to the quality of the material under conversion, and also with the hygrometic state of the atmosphere ; for which reason the yearly working is stated, instead of the result of any one week's operations.

Dr Lardner's Cabinet Cyclopædia.

PROFITS OF THE MULBERRY.

Though it would seem probable that almost any farmer who has 100 acres or more, if he understood the subject, and was duly informed as to the profits of cultivating silk, would appropriate at least three acres to it, I will confine my calculation on the profits of a single acre, which the farmer can always extend or contract to suit his own views.

A number of calculations have been given to the public, by different persons, all founded on experience, and probably all true. But as they have been made on different soils, and no doubt with different management and different degrees of skill and care, it is naturally to be expected they all differ. Probably the mean between them may be relied on as a fair average result.

Andrew Palmatier, Esq. of New York, has given a statement from two acres, which divided will give the following for one acre:

One acre of ground, fenced by mulberry hedges and set out with trees,	$250
Interest and additional expense during five years,	187,50
The acre will then produce:	$437,50

From 5 to 10 years,	10 per cent.
" 10 to 15 "	47 "
" 15 to 20 "	112 "

which will average nearly 45 per cent, for the first twenty years, and continue at 112 per cent afterwards.

Mr Fitch, who is cited as authority by the secretary of the treasury, calculates 40 pounds of silk to an acre, and Mr Storrs 60 pounds.

According to the calculation of Mr Palmatier, an acre will pay on an average of 20 years $205,62, and $490 a year, afterwards.

Mr Fitch's statement, allowing the silk to be worth 4 dollars per pound, would yield a gross amount of $160, and that of Mr Storr's $240. Mr Storrs has had much experience, and probably his estimate may be relied on as the average ; though in a better soil, some one may have gone far beyond it.—*Silkworm.*

SILK WORMS.—The Silk Culturist inquires how to prevent the black ant from destroying the silk worm. A correspondent says, "Let the frames on which the worms are fed be placed some distance from the walls of the room, and nail strips of new tin (two or three inches wide) about the bottom of the standard posts supporting the feeding frames, and the ants cannot climb over the tin. A similar rim of tin placed about the Chinese plant when set out will prevent the cut worm from reaching the plant."—*Northampton Cour.*

[From the Silk Culturist.]

Culture and Transplanting of the Mulberry.

No. I.

MR EDITOR:—At a time when the feelings of the community are so much interested in the culture of silk, it seems important that all who have investigated the subject, should communicate freely the results of their experience and observation, that those who are desirous of aiding in the advancement of this valuable branch of industry, should possess the knowledge which is necessary to embark in it, without too great risk.

Although the raising silk has been carried on in the old world for centuries, and in this country for several years, it is still, to most of us, a new business. It is true that we have the means of obtaining a great deal of information from European authors, but much of it is useless or worse than useless in its application to this country. It will not do to follow them as guides. We must collect facts from this country, and opinions founded on experience and observation here, or we incur the hazard of discouragement and failure.

The importance of having such means of spreading information as is afforded by your paper, *(The Silk Culturist,)* cannot be too highly appreciated by the public ; and I am happy to see it so extensively circulated. I propose occasionally to give you the result of my investigations, as often as I can communicate any thing of practical information, and with this view I propose to give you for this and some succeeding numbers a few hints on the transplanting and culture of the mulberry tree.

The first thing to be decided upon is the kind fo mulberry to be used, and as all are generally given up, for various causes, except the Chinese Mulberry, *(morus multicaulis,)* and the Italian or common white Mulberry, *(morus alba,)* it remains to decide between these two kinds.

There appears to be no difference of opinion with regard to the superior utility in every respect of the Chinese over the Italian, when the climate is equally adapted to both ; but there is so decided a difference of opinion among those who have tried the culture of the Chinese tree in this State, that the public must for the present remain in

some doubt whether the certainty of its living through our winters is sufficiently established to warrant exclusive dependence upon it. One of my friends transplanted several thousand trees, and in three winters lost them all, although they were placed on different kinds of soil and in different exposures.

Another friend planted 800 and lost all but 130. That 130 I took and planted in different places, 75 in one spot, and the remaining 55 in another. The former all died, of the latter about one in five lived, but were very much injured. Another friend bought one or two about four years since, and has since successfully propagated them from cuttings, layings, inoculating and engraftings, and has now on hand several thousands which lived through the winter as well as the white mulberry tree beside which they grew. It is worthy of remark, however, that the greatest propagation, those which I last named, were engrafted in the white mulberry stock. How much this affected the case it is impossible to determine without more experiment. As the facts are now, it would seem to be more prudent to depend upon the white mulberry tree, which we do know is hardy, and seems to withstand the cold of our severest winters, and affords food nearly or quite as good as the Chinese mulberry, and at but little more expense. Besides, it is believed that the Chinese Mulberry is more hardy when growing on the white mulberry stock, so that it will certainly be better, and probably cheaper, to plant the white mulberry, if the object is to have eventually a plantation of the Chinese tree. If it is decided to plant white mulberry trees, the next thing is to decide whether they shall be planted close in rows, leaving room enough between the rows for the trees to spread laterally, and for picking and carrying away the leaves, or whether they shall be planted in the orchard form. The former is the best for many reasons. By that mode, from one to three thousand trees may be planted on the acre, which will furnish a large amount of foliage in a short time, and in the latter it would be many years before the produce would begin to pay for the investment. In the former mode the leaves would be picked from the ground, and the time which would be required in the orchard would be saved, and the danger of falls, &c. would be avoided.

Yours, respectfully, S. W. Brown.

RELATIVE EXPENSES OF ANIMAL LABOR.

AS PERFORMED BY HORSES OR OXEN.

Animal labor is one of the most important items in the expenses of the farm, whether performed by horses or oxen; but as it will really be admitted, there is a difference in the amount, as performed by one or the other, and that difference I conceive to be altogether in favor of the latter.

The horse is said to be one of the most expensive animals kept on a farm. In order that he may be kept in condition for work, it is necessary that he should have a great deal of the best food together, a warm stable, and hourly and almost constant attendance, and whilst the ox requires as little and as plain food as other animals of its size, and less attendance. The horse is more liable to disease and casualty than any other animal, the ox less, — it is a very common thing for a farmer to lose a horse, but a very rare one to lose an ox. Likewise the horse, when arrived at maturity, or an age which fits him for a farmer's team, begins soon to depreciate in value, and is at length worth little or nothing more than his hide — while the ox at any age, if fat, is worth to the butcher more than he even costs in his prime.

The only objection urged against an ox is their slowness. But in most of the ordinary business of the farm, this can scarcely be an objection. In drawing into the barn hay and grain in the time of harvest; drawing manure from the yard on the farm; drawing wood to the door; ploughing and clearing ditches for draining land; drawing rails for the repair of fences, &c. &c. oxen are conceded by all, to be the safest and best of teams. And even before the plough the difference of speed is not sufficient to make good the difference in the expense of keeping and attendance. A man with a pair of oxen may put in twenty or twenty-five acres of wheat in one season, while with a pair of horses he can but little exceed thirty acres.

I shall here add a comparative view of the expense of keeping a pair of horses and a pair of oxen for eight years. I shall suppose them both five years old, the first pair of oxen to be fattened and sold when nine years old, and their place supplied by another pair five years old, and then to be kept four years, and then fattened and sold together with the horses, which will then be thirteen years old.

A yoke of oxen 5 years old will cost	$80,00
Interest 4 years	22,40
Keep 4 years	160,00
	262,40
Deduct oxen sold (supposed fat)	100,00
	162,40
Another yoke 5 years old cost	80,00
Interest 4 years	22,40
Keep 4 years	160,00
	424,80
Deduct oxen sold	100,00
	$324,00

A pair of horses 5 years old cost	160,00
Interest 8 years	80,60
Harness for 8 years	50,00
Shoeing for 8 years	50,00
Keep and attendance for 8 years	575,20
	924,80
Deduct horses sold	100,00
Total cost of 8 years' work by horses	824,00
Total cost of 8 years' work by oxen	324,80
Difference in favor of oxen	$500,00

If the above estimation be correct, (and if it be not, I believe that a near approximation to the truth will be found to increase the balance in favor oxen) it will be seen that two pair of oxen may be kept with less expense than one pair of horses. —*Ohio Farmer.*

A KITCHEN GARDEN.

The importance of a little spot to raise vegetables for family comfort, convenience and economy is not known to every one. I have practised for many years raising my own potatoes, beets, carrots, parsnips, cabbages, &c.; also, sweet corn, and beans, peas, squashes, and other garden vegetables for my family table. Thus I obtain a very wholesome food, and save much expense of purchasing meat;—I am not plagued with a big butcher's bill,—nor do I require so much bread, as when I have none or few of these valuable fruits. The labor, too, which I perform with my own hands has its benefits; it is both healthful to the body, and a saving of expense. I often find myself with a sweaty brow and a tired limb; but what of this? It surely brings health, and no one ought to be ashamed to handle the hoe or the mattock: it is man's natural employment. We were made to till the earth, and it is a good preventive against a thousand ills, moral as well as physical. Besides, what mechanic or farmer can bear to set down, day after day, to a dish of nothing but pork and potatoes, when, by half an hour's work each day in his garden, he might be well provided with various dishes of green sauce? If he has a family of young children, it is still more important that he should attend to this matter.

Now, ye men of industry and economy—ye lovers of life and of money—I enjoin it upon you to have a kitchen garden—a little quarter of an acre, where you can employ yourselves for a while both morning and evening, in bringing to maturity those good things, so useful and so healthful in your families. The earth is the mother of us all, and on her we all depend for our nourishment. We therefore must not forsake her. If there is no labor of the husbandman, then our bread will fail us. The soil must be cultivated, in order to its producing plenteousness for the food of man and beast. The professional man, and the mechanic, and the man of trade, should not be so exclusive in his occupation, as to refuse an occasional and personal attention to these things. To a man who takes pleasure in beholding the progress of vegetable nature, it will be no task to attend to the trimming of his garden plants, thus giving vigor to his body, and a profitable employment to a thoughtful mind. Is it a mean thing to be seen with a hoe or a spade upon your shoulder? Fudge! 'tis the prejudice of ignorance. Awake, then! "In the morning sow thy seed, and in the evening withhold not thine hand."—*Bridgewater Patriot.*

Sowing Mulberry Seed.—A writer in the Silk Culturist, who is an experienced cultivator of the mulberry, says that any time in the month of August is a suitable season for sowing the mulberry seed; that the plants may be protected through the winter by a covering of straw and horse manure, and in the spring they will start early and grow vigorously, and attain by the fall to nearly as great a height as though they had been sown the preceding spring. But little straw should be used in covering, otherwise rats and mice may be induced to burrow in it, and destroy the plant. There is one advantage in this late sowing—new seed may be obtained and sown, which is more sure to vegetate.

Garden Thieves.—We are requested to say that an association has been formed, whose determined object it is to pursue and punish to the law's extent those plunderers, young and old, who are in the habit of committing depredations upon various enclosures and garden spots—especially those situated a few miles from town. A watch is set for these skulking pilferers, from whose vigilance it will be difficult to escape.

Simple Remedies.—Cotton wool wet with sweet oil and paregoric relieves the ear ache very soon.

Honey and milk is very good for wounds; so is strong salt water.

A poultice of wheat bran or rye bran, very soon takes down the inflammation occasioned by a sprain.

Low blackberry leaves made into tea is extremely beneficial for a sore mouth occasioned by taking calomel, or from any cause.

New Wheat.—On Thursday, the 6th inst., new wheat was selling in Rochester, at *a dollar a bushel.* The Rochester papers say the new wheat is of excellent quality, and that the crop comes in well, as to quantity.

[From the New England Farmer.]

MERINO SHEEP.

Mr Fessenden—Having for many years been a breeder of fine wool sheep, I beg leave to offer you the result of my experience, and if it should not correspond with the observation of other breeders, I can assure them, my flock has never suffered, from want of care and expense in their first purchase, for unwearied attention to their management or for the good condition in which they have uniformly been kept. The sheep were provided with good pasture in summer and extensive, airy sheds in winter, and fed on English hay, with a few potatoes towards spring. The merino sheep imported into this country, from 1803 to 1811, were chiefly of the Spanish Escurial, the Paular, Gaudaloupe, Infantado, Montano and Nigretti.

The Escurial were beautiful fine wooled sheep, free from grease, *not* carrying a very heavy fleece, or a very strong constitution. The Nigretti were the largest sheep of any imported. The other three flocks were of good size, short legs, round chest and sheared very large and heavy fleeces. My flock was fro n the Paular and Gaudaloupe, and particularly distinguished for the quantity and quality of their wool, and differs from the others in a looseness of skin on the neck, with a more evident degree of throatiness. Their lambs were generally produced with a coarse, hairy appearance, which was succeededby a coat of unusual closeness and of excellent quality. Among the great numbers of sheep imported into this country, individuals belonging to the same flocks differ greatly in the size of the carcass, as well as the weight and fineness of the fleece. The great object, at that time in forming my flock, was quantity and quality, for, with the first requisite I always found the hardiest, strongest constitutions. I endeavored to obtain a fleece that would produce the greatest profit and so well had I succeeded that to the time when Saxony sheep were introduced, the entire flock averaged four and a quarter to four and a half pounds of washed wool, and sold at seventy to seventyfive cents per pound. There were no wethers in the flock. Ewes would shear from three and three quarters to four and a quarter pounds. Bucks from six to nine pounds. Yearlings from four to four and a half.

On the importation of Saxony sheep I bought largely, confident I should soon realise in fineness, more than I lost in the diminished quantity of the merino fleeces. But I was sadly disappointed, for I lost not only in the *value* of the fleece, but still more by feebleness of constitution. My merino lambs used to drop in March, and their close hairy coats afforded a protection at once. But I found March was too cold for my delicate, half naked little Saxons. I was obliged to have them drop in May. This was a bad arrangement, for when the lambs were weaned, it was so late in the season, that the mothers would not get fat, as formerly. The merino lambs were so hardy that the loss of *one*, could almost always be traced to some accident or neglect, but the Saxons would die in spite of all my care and attention, full fifteen and twenty per cent. The average weight of my fleeces became very much reduced and I never so'd my clip for over eighty cents per pound. Two years ago I became satisfied of my mistake and loss, occasioned by the Saxons, and sold out the whole, reserving to myself such of my old merinos as I could select, that had escaped the general slaughter, and by repurchasing some, I had previously sold, I have now a small flock of merinos with which I shall be satisfied, without further experiments. The ewes, with two exceptions, have lambs by their sides and their fleeces in June averaged four pounds one ounce. Some of the oldest shearing less, and others more, and one reaching five pounds fourteen ounces. One of the bucks sheared eight pounds and one quarter. This wool washed on the sheep, sold at sixtyseven cents per pound, cash.

It is a peculiarity of the merinos, of which I am speaking, that they abound with a greasy secretion, from the skin,—(not stiff hard gum) but an oily substance, which spreads itself through the whole fleece, so that the surface assumes a blackish or dark drown appearance and retaining the dust and soil, forms with it a coat that contributes largely to defend the animals from the ill effects of cold and wet. It improves rather than injures the quality of the fleece beneath, and it is easily removed by ordinary brook washing.

The wool is of very uniform fineness, close and compact and extends quite down to the hoofs and over the face.

In this part of the country there is a general disposition to get rid of the light *fleeced* and light *constitutioned* sheep and replace them by the Spanish merinos, as we formerly had them. Before the return of another season I intend to import from Spain, for the use of my own littl: flock, (for the benefit of a cross of blood) two merino bucks, that shall possess as far as possible, the great requisites of *quantity* and *quality*. T.

Hartford, Ct. August, 1835.

KENRICK'S ORCHARDIST.

[We copy the following notice of this truly valuable work from the New York Farmer.]

This second edition of Mr Kenrick's work is very much enlarged and improved. The mechanical part, in character with the Boston press, is very beautiful. The title of the work denotes its comprehensiveness and probable usefulness;

and an examination fully sustains its claim to public patronage as a very convenient and valuable publication—one that every farmer and gardener will find a very important and almost indispensable acquisition to the library. We know of no American work on this subject that will compare with it in the variety and value of the information, and in cheapness.

Mr K. has taken the responsibility of a large edition, and we hope he will be remunerated. The book can be had in this city at the seed store in Barclay street, and probably at the others in this city.

On a future occasion we may probably give a further notice. S. F.

AGRICULTURAL WAREHOUSE, BOSTON.

"Agriculture is the art of arts, without which man must be a savage, and the world a wilderness;" therefore anything which tends to advance a more perfect knowledge of this art, or to develope and distribute facilities which simplify and render it more productive, is of general utility.

The Agricultural Warehouse, Boston, is an establishment extending from North Market street to Ann street, containing four rooms, 90 feet by 40, and all filled with agricultural implements, seeds, and various patented articles; it is a complete museum, in which is deposited every thing that is new and useful to the cultivator, and which every farmer ought to make it a point of visiting whenever he happens to be in Boston.

This establishment has had a great influence upon the state of agriculture in New England, in helping to eradicate what was considered the almost immovable prejudice of farmers in favor of old customs, &c. Time was when you might as well have undertaken to overturn Mount Washington, as to convince the farmer that this invention or that improvement was of real utility; or in fact that any improvement was necessary or could be made upon existing methods: cultivators considering the very ultima thule of good farming to be a strict adherence to what their fathers practised and performed; beyond this it was impossible to go. But instead of the uncouth and imperfect tools they used, their place is now supplied by beautifully simple and easily operating labor-saving implements, machines, &c. Among the great variety of articles for sale at this establishment, many are found far superior in form and construction, and better adapted to the purposes for which they are intended, than any which have been in use in this country. Here is displayed in every variety of form specimens of the inventive genius of our countrymen; and here is a grand bank for the farmers, from which they may draw deposites, without a check, of infinite value to them.

In this country, agriculture is still imperfect, though much advanced, and we have yet to learn some new practices, adopt some new improvements, accustom ourselves to read and to observe, before we bring it to that state of perfection, which it is capable of receiving. It is for the Farmer's own interest to sustain establishments which throw in their way every facility.

It has been said that, "he who does most advance the great interests of agriculture, will justly, hereafter be considered as his country's greatest benefactor." Surely, then, the proprietors of this excellent establishment, so happily adapted for the Farmer's convenience, and which cost large expenditures, and years of labor, to establish, on a firm basis, will have no small claim to this distinction.—*Boston Courier.*

Remarks on the Horn Distemper.

Animals of the forest, guided by the principles of instinct, regulated by the dictates of nature, and uncontroled by man in their food, air, rest, and exercise, are seldom affected by disease, while domestic animals of all countries and climates, more directly under the control and dominion of man, are subject to a variety. There are but few instances on record of prevailing diseases among the different tribes of wild animals, while every appropriate periodical informs us of diseases and their remedies of the whole class of those more immediately under the direction and government of man. Having lately had a fine young cow of the short horn Durham breed, afflicted with the disease called Horn Distemper, and she having thoroughly recovered, I thought it would not be improper to offer for publication in your valuable journal a few remarks on the disease, and my method of treatment. It is evident this distemper affects the internal substance of the horn, usually called the pith, insensibly wastes it, and eventually, if suffered to make its progress unmolested, leaves the horn entirely hollow. The pith is a porous, spongy bone, whose cells are covered with an unctuous matter and filled with numerous small blood vessels, is overspread with a thin membrane, appears firmly united to the head, and in a healthy animal completely fills the horn, which only serves as a sheath. In horn distemper this bone is partly, at others wholly wasted, commencing at the extremity of the pith. The usual symptoms are a general dulness of the countenance, a tardiness in moving, a formation about he eyes of a yellow viscous matter, failure of appetite, a desire to lie down, a giddiness and frequent tossing of the head, often a stiffness of the limbs is observable, and in cows the milk fails. Let the other symptoms be what they may, there is always a sudden wasting of the flesh. The horn

ays loses its natural heat, and a degree of eldness is manifest to the hand by grasping it rmly. When in one horn, as is often the case, here will be a very sensible difference in the eeling. If upon examination the horn is cold, we need not doubt the presence of the malady, et without an acquaintance with some of the preeding signs, we might not be induced to examine he horn, or suspect the evil. As soon as the discovery is made, a hole with a ten-penny nail gimlet should be immediately bored underside the orn, three or four inches from the head. If the imlet passes through the inside without resistnce, it may be bored as low as is judged the holowness extends; this, generally, if done in seaon, is all that is necessary. These holes should, owever, be kept open, that a free discharge may e encouraged, and a communication be kept up ith the air. Bubbles are continually forming at e orifice, through which a thin fluid oozes after e horn is bored. This seems to indicate an inrnal fermentation. Putrid matter may be formd on the periosteum, and entering into the interices of the bone, may dissolve the oily substance, nd form a fluid so putrid and corrosive as to dislve even the bone itself. From the sensible elief that an opening into the horn gives the beast, is more than probable that the distress manisted arises from compression, occasioned by the xpansion of the putrid and confined air within, ather than from an effect produced on the blood nd juices. In aggravated cases the inside of the orn should be thoroughly syringed two or three mes a day with salt and water, soapsuds, pepper nd vinegar, or any simple cleansing material, ever apply spirits of turpentine, as the manner of me is.) If their appears to be much inflammaon about the head, a moderate bleeding in the ck would be beneficial. But when the distemr has communicated its effects to the brain so as prod a high degree of inflammation, it is uch to be doubted whether any mode of treatent would afford effectual relief.

Milch cows are more liable to attack than other scriptions of horn cattle. It is not common ong oxen; I never knew a bull to have it; ers and heifers are thought to be exempt from nder three years of age. It cannot be considd as contagious. Neat cattle are subject to a order commonly called Tail Sickness, which wasting of the bony substance of the tail, d if not cut off above where the defect reaches, proves fatal. It frequently accompanies horn distemper.—*N. Y. Farmer.*

RYE.

Soils of a sandy or gravelly nature are proper for rye. nds which are too rich or too poor for wheat are well propriated to this crop, which will endure either extreme of barrenness or fertility without being starved and shrivelled in the one case or mildewed and blasted in the other better than wheat.

In the Memoirs of the Board of Agriculture, vol. I. page 82, it is said "Rye should be sowed the last week in August, or the first week in September, at the rate of about thirty six quarts per acre; some say forty eight quarts. But if not sowed at that time, it ought to be delayed until late in November, so that it may not come up until spring. A. Worthington had a good crop, which he sowed in a January snow storm. Rye raised on upland makes much better flour than that which is raised on low or damp lands."

The quantity of seed to be sown to the acre should vary according to the soil, the time of sowing, and the purpose for which it is intended. Mr Adams Knight of Newbury, Mass. received a premium of twenty dollars from the Mass. Agr. Soc. for a crop of rye. In applying for this he states that the acre, which produced the premium crop, amounting to the great quantity of forty five bushels and five eighths of a bushel, was sowed in the month of August with three pecks of seed only. He does not tell us at what time in August the seed was sown, but that "there is standing on said acre of land seventy five apple-trees, from two to six inches through at the root."

In the first volume of communications to the British Board of Agriculture, page 341, in treating of the culture of rye in Russia, it is observed that the produce from boggy lands drained and sowed with rye is upwards of forty bushels to one sowed; and they generally use a much smaller quantity of seed in sowing such lands. A proof that rye will bear very plentifully manuring may be adduced from a case reported by Mr L'Hommidieu of New York, who observed, in substance, that a neighbor of his manured twenty square rods of poor, gravelly, dry soil, with four thousand menhaden fish, and sowed it with rye, at the rate of about one bushel to the acre. In the spring it was twice successively eaten off, close to the ground, by sheep breaking in, after it had acquired a height of nine inches the first time, and six inches the latter. These croppings only served to make it grow thicker and stronger than before; and when harvested it produced sixteen bushels, or at the rate of one hundred and twenty-eight bushels to the acre. This account is given in *Transactions of the New York Agricultural Society*, part III. p. 35: and though it may appear incredible, Mr L'Hommidieu declared that it was attested by many witnesses of good standing and reputed for veracity.—*N. E. Farmer.*

LARGEST FLEECE.—*Little cry and great wool.*—We are informed by Luther E. Stevens, of this place, that he recently took 1130 lbs. of wool from 301 sheep, mostly Merino. This is allowed to be remarkable by wool growers. A gentleman in New York this spring, stated in one of the papers that he had taken a fleece weighing 7 lbs. and 3 quarters from one sheep. Another farmer in Vermont, mentioned through a paper that he had taken a fleece weighing 9 lbs. 10 oz. — whether washed and tagged he does not say — and calls upon his brother farmers to beat it, if they can. Mr Stevens took a fleece last week from a full blood Merino buck, three years old, which, when washed and tagged, ready for the market, weighed 9 lbs. and 12 oz.! This is the largest ever known in this country, and he challenges any farmer any where to produce a larger one.—*Claremont Eagle.*

[From the Silk Culturist.]

Suffield, June 15th, 1835.

Mr Editor:—Having been often requested, by several gentlemen engaged in the silk business, to furnish some information for your valuable paper, on the best method of increasing the Morus Multicaulis, I send the following communication, and if you think it worthy of a place in the "Culturist," you are at liberty to publish it.

I think that to commence by inoculating is calculated to multiply the Morus Multicaulis the most rapidly, as it affords facilities for increasing them many other ways afterwards. Inoculated trees are more abundant in sprouts than grafted ones which will make good layers, and besides furnish abundant cuttings for another year. They are also more forward. I have three thousand which were inoculated last August, the most of which have already grown more than a foot, whilst those grafted the present season are just putting out.

Trees intended to be inoculated the present year, should be trimmed immediately and kept clean from sprouts from the ground a foot upwards, and should stand at such distance from each other as to make it convenient to work around them. Success depends much on the condition of the trees.

Select for the buds the small size of ripe twigs of the present year's growth, and cut off the leaves near the buds; select a smooth place in the stock and make a perpendicular slit downwards in the bark, about half an inch, cross this by another slit at the top, taking care not to cut the wood, then take off the bud, (this should be done with expedition, as the influence of the sun and air injure it if exposed,) this is done by entering the knife half an inch above the bud, taking it out with a slight scollop to a quarter of an inch below, turn the bud over and pick out the wood, leaving in the roots, then with the knife raise the corners of the bark and enter the bud, then place the thumb nail on the leaf stock, and push it down to the bottom of the slit, then with a drawing stroke of the knife cut off the top of the inoculation exactly corresponding with the cross cut, and bind down the bark with woollen yarn, taking particular care in the whole operation not to mar the inside of the bark or the wood of the stock.

A knife much used in New Jersey for budding peach trees, which is perfectly simple, I think best adapted to this purpose; the blade is made by a common blacksmith, one inch and a quarter long and three eighths wide, with a shank to drive into the handle, which is made of wood, the point of the blade is rounded back, having the edge convex.

In addition to the above described knife, I placed in the opposite end of the handle of mine a small piece of ivory, into which I filed a notch of suitable size to stride the bud, with this I press dow the bud, after it is entered, which is preferable using the thumb nail.

Inoculations seldom adhere to the stock, on around the edges, therefore the smaller the pie of bark the better, provided the organs of the b are preserved, and also for the benefit of the tre as the smaller the wound the quicker it will he and besides, if the piece of bark be large, it leav a hollow place under the bud which often caus it to wither.

I have recommended tying with woollen ya because it is more elastic and convenient t loose matting. These strings may remain fifte or twenty days, regard however being had to t rapidity with which the trees grow.

I have further noticed that of those buds inser ed without taking out the wood a much larg proportion die than those having the wood r moved. I have not therefore recommended although it is more expeditious.

The best time for inoculating, is from the mid of July until the 1st of September, but the origi stock should not be taken off until the follow Spring.

Thomas J. Bestor.

[From Kenrick's New American Orchardist.]

NUMEROUS SUCCESSIVE CROPS OF COCOO

From the present encouraging appearances, are induced to believe, that instead of one sin and solitary crop of silk in a year, we may yet enabled, in our climate, and with our prolong summers, to raise not merely two crops of silk year, with a void interval of time between the but numerous crops of different ages at the sa time and in rapid succession for a season. W the complete establishment of such a system new era with us will commence. There are m berries which will renew their foliage sudde and for numerous successive times in seas Where a regular succession of crops ca thus obtained, with a diminished proportion of lab of land, of cultivation, of habitations and of f niture, for the successive generations of insec how greatly augmented must be the profit.

Some, I am aware, might object, on the supp sition that the plan has been before tried an hu dred times in Italy, in France, and other countri Not a doubt exists but it has been tried. But w have no evidence whatever that in a suitable c mate, it has ever been tried fairly and aright, a failed. It seems important, that in this case, on the eggs of the former year should be used, these by age, are found to hatch more prompt and simultaneously, and all these may be sav from the cocoons of the first crop produce which would prevent the possibility of a degen racy. These are to be preserved dry at a suitab temperature, and to be transferred to an ice hou

necessary, till the season they are wanted. Dr Millington, however, is persuaded that it might be advantageous to have different races of different ages.

In Tuscany, so fine is their climate, that two crops of silk are annually produced. The same has been effected by Mrs Parmentier, at Brooklyn, on Long Island. The first crop being fed from the leaves of the *Morus multicaulis*, *Morus alba*, and other mulberries promiscuously, were of different colors, some white, and some of an orange color. But a second crop of worms from the same cocoons, being fed exclusively on the leaves of the *Morus Multicaulis*, finished their labors in the short space of twentysix days from the commencement, which was about the 30th of July. This last circumstance might be, in part, owing to the warmth of the season. The cocoons thus produced were not only of larger size than those of the first crop, but what is still more important, they were beautiful and shining, and of the *whiteness of snow.*

At the Fair of the American Institute of New York, in 1833, cocoons were produced of two successive crops of silk. The first crop were hatched 11th of May. The second crop the 8th of July, and a third crop might have been produced. All being fed on the *Morus multicaulis*, they were of a snowy whiteness. In the same year Mr E. Stanley, of Ogden, N. Y., produced two successive crops: the second were hatched by accident, and the cocoons were fine. In Brattleboro', Vt., in the same year, two successive crops were produced from the common white mulberry. And in 1835, as Dr Holmes has recorded, *two crops* of cocoons, both of them large and perfect, were produced in Winthrop, Maine. See his account in the Maine Farmer, vol. iii. Feb. 20, 1835, published at Winthrop.

In all these cases, the second crop of silk worms was produced from the eggs from the cocoons of the first crop.

Dr Millington, however states that this practice is wrong. In his valuable communication in the American Farmer, for January, 1829, he has stated that the eggs of the same year hatch but partially, or do not hatch so regular as those of the former year. He notes the date and the day the eggs are produced, on the papers on which they are deposited; and those eggs of a similar age are brought forward to hatch at the same time, and then they usually are all ready to spin together. These are carefully rolled up and preserved in dry boxes, and kept in a dry cool cellar, and in June or July of the following years and when the heat of the climate or season requires it, they are transferred to a dry ice house.

Among the great advantages of having silk worms of different ages in the same apartment, Dr Millington states, "that the same room and shelves will hold abundantly more worms at the same time, without being crowded; and a room and shelves which will but barely accommodate one hundred thousand full grown worms, will better accommodate two hundred and fifty thousand consisting of four or five different ages, provided each age or parcel are about equal in number, and are hatched at about seven or eight days apart. Another advantage is, the same number of hands, with the same quantity of labor, will make more silk and do it with less trouble and perplexity, than when the whole crop of worms are of the same age, and all spin at the same time. When silk worms are young, they are extremely small, and require but little room, little food, and little attention. All the food they consume, up to the time they are sixteen days old, would not make more than one meal for them when full grown; consequently when the whole crop of worms are of the same age, there is at first but little to do; but for a few of the last days they will eat voraciously, and must all be removed and cleaned frequently, and all set to spinning at the same time. So much to do at the same time creates a hurry and perplexity which must eventuate in a loss for want of time to do all that is required. * * * * When the worms are of different ages, the labor required is more equalized. A part of them will constantly be of the age to require considerable attention. But this parcel will be so small, that the hands will have spare time to attend to the younger parcels. I have certain shelves allotted to each parcel during a certain age; and *other shelves exclusively for them to spin on.* I begin with the fresh hatched worms, placed on the shelves allotted to worms of that age. After their first moulting I pass them to the shelf allotted to the next age, and again supply the first shelf with fresh hatched worms. In this manner I continue, through the whole season, to bring young worms on the first shelves, and pass them on until they reach the spinning shelves, from which the cocoons are removed, to make room for the next succeeding parcel."

"Last year I had silk worms constantly in feeding from the 20th of April until after the th20 of October."

We are assured on first rate authority, on that of Gideon B. Smith, Esq., of Baltimore, that Dr Millington is an eminently practical, scientific agriculturist, and has made silk one of the principal objects of his attention during several years. Mr Smith, from his own experience, "bears testimony to all Dr Millington's remarks. And considers his as the very best article which had yet appeared." This was in January, 1829. Dr Millington resides at St Charles, in Missouri, about latitude thirtyeight degrees.

I am perfectly aware, that the excellent Dr Pascalis, at the time he published his work on silk, at New York, in 1829, endeavored to explode the idea of attempting to raise numereus crops, or even two successive crops of silk in a season. He states some plausible reasons for his objections, particularly the record of the failure of an attempt near Lyons, about 1820—and also the failure of the attempts at the Isle of Bourbon, situated beneath a fiery sun, and within the burning zone. In the next year, and in No. 2 of his valuable work, "The Silk Culturist," for January, 1830, Dr Pascalis has recorded the successful introduction of the silk culture to the *north of France*, a thing which had been deemed at least, equally as problematical thirty years before. Also that Dr Deslongchamps had even succeeded in raising a second crop of cocoons from the eggs of the first. Dr Deslongchamps was one of a society of *savans* at Paris who had performed many experiments to prove that this branch of industry can be successfully carried on through all the northern departments of France. He also had ascertained by experiments at Paris, that the cocoons which were produced by silk worms fed exclusively on the *Morus Multicaulis*, were even rather heavier than other cocoons. The more complete and effectual conversion of Dr Pascalis to the system, does not appear so fully until afterwards, when speaking of the *M. Multicaulis* which he had received from France, he says, "after the discovery of this plant, a doubt no longer exists, that two crops of silk may be produced in a single season."

To Housewives.—In this day of improvements, few have been suggested of more importance, especially to females, than the new mode of washing clothes, which has recently been introduced into this town [Newburyport] through the agency of two benevolent individuals, now residing at a distance from us. It has been tried by quite a number of families with complete success, and those who have tried it are desirous of communicating it extensively, that others may reap the same benefit which has accrued to them. It is to be used only for white clothes. It does not answer the purpose in case of calicoes and woollens.

1. Mixture.—Five gallons soft water, add half a gallon of lime water, a pint and a half of soft soap, or a pound of hard soap, and two ounces of carbonate of soda.

2. Method of Washing.—Soak the clothes over night if very dirty, at any rate wet them thoroughly before putting them into the mixture. When the above mixture is at *boiling heat*, put in the clothes that have been soaked or wet, merely rubbing such parts with a little soap that are unusually soiled. Boil them *one hour*. They are then to be taken out and drained, and thoroughly rinsed in warm water, then in the indigo water as usual and they are fit for drying. The lime water may be prepared and kept on hand—the soda or pearlash can be procured cheap, by purchasing it in a large quantity. Let all who feel that washing-day is a day of hard work and weariness, cease to complain, until they are willing to try this safe, easy and expeditious mode of lightening their burdens.—*Essex North Register.*

COMMUMICATION FROM THE HON. A. SPENCER.

Mr Blydenburgh—I cannot repress the expression of the satisfaction I derived from the perusal of the first number of "The Silkworm," conducted by you. Others, many others, may prefer reading political and partisan newspapers, but to me there is more pleasure in reading and contemplating on the bounties of a munificent Providence in providing so lavishly for the comforts and enjoyments of man. This remark is illustrated and enforced by contemplating the silk-worm, in its birth, its various changes, its nurture, and finally its fabrication of the cocoon, which yields the finest known materials for fabrics, almost indispensable to the embellishment and comfort of the human race.

I am not one of those who believe that we are the most virtuous and best informed people on the face of the earth; nevertheless I do believe that we have among us many, very many, ingenious and inventive men, capable, with proper inducements, of carrying to high perfection, and in the simplest manner, the discoveries of past times. We have also an intelligent population, ready and zealous in seizing on any new sources of industry which shall promise an adequate reward for their toil and labor. I think it then only necessary to satisfy our agriculturists that the culture of silk will be attended with a handsome profit, to insure its general adoption. I feel an entire confidence that you will be able to convince the most sceptical that the culture of silk will afford to our farmers a richer reward than any other crop they can raise, and that ten acres devoted to the mulberry, and the rearing of the silk-worm, in a farm of one hundred acres, will at the end of five years produce a greater profit than the remaining ninety, however skilfully cultivated. This profit will keep increasing from year to year, in proportion to the growth of the trees; and when we add to this the fact, that the tending of the worms will require only the labor of women, children and feeble persons, that it interferes not at all with the labor of those who cultivate the ninety acres, and that therefore it is all clear gain, who can doubt of the result?

The general substitution of cotton for linen

fabrics, which were formerly made by our females, and the introduction of many labor-saving machines, has relieved our women from much manual labor, and they have leisure time, which they would willingly devote to any occupation adapted to their capacities. The rearing of the worm, and reeling the silk from the cocoons, is the very employment adapted to them. Can it be doubted, then, that the matrons and young women of the country will cheerfully and zealously enter upon an employment so honorable, so profitable, and I may add so national?

My particular purpose in this communication, was to call your attention to an act of the Legislature of this State at its last session, which for its wisdom and patriotism reflects honor on the State. This law requires the agents and inspectors of the state prisons to cause the manufacture of silk goods to be introduced and carried on in those prisons, and for this purpose they are authorized to purchase as well cocoons raised in this country as the raw material imported, at such prices as they may deem reasonable, and to extend the business, as the same can be prosecuted, in the judgment of the inspectors, with a prospect of ultimate success.

The probable and almost certain effects of this law will be to introduce into this State the manufacture of silk immediately, without waiting indefinitely the enterprise and patronage of private individuals. The certain effects of the act will be to stimulate and encourage the culture of silk by opening two certain and steady markets for the purchase of cocoons; and when we reflect that the facilities for transporting cocoons to the prisons are unequalled, there is every inducement to commence the culture of silk without loss of time.

There will, however, be a great inducement with our females, by the enhanced price of reeled silk over the cocoons, to reel off the silk from the cocoons they produce, and sell it in that shape. They will have their option, either to sell the cocoons, or the silk in its raw state. Those who prefer the latter mode, by the aid of Gay and Mosely's new invented reel, will soon perfect themselves in the art of reeling.

What magnificent results must follow a general attention to the culture of silk!

We shall avoid a direct annual drain from the United States of more than $10,000,000. This amount, instead of being drawn from the country for the support of foreign agriculturists and mechanics, will go to reward and invigorate our own. In the course of a few years we shall become exporters of American manufactured silk, as well as the raw material. It is a business, too, which cannot be overdone; the demand will always bear a just proportion to the product. In many countries, particularly Great Britain, the climate is not genial to the worm; while in ours it is established beyond controversy, that we may produce, with proper care and skill, silk of as fine a texture and lustre as is produced in Italy or France.—*N. Y. Farmer.*

MORUS MULTICAULIS.

For sale at the Agricultural Warehouse, 51 and 52 North Market street, any number of Trees of the Morus Multicaulis or Chinese Mulberry. These trees were propagated in this country. The superiority of the foliage of this tree as food for the silk-worm over all other, has repeatedly been tested, and is proved beyond a doubt. The price for Trees, from 4 to 5 feet high is $30 per hundred, $4,50 per dozen, &c. 50c single. Trees but 2 or 3, with good roots $25 per hundred.

GEORGE C BARRETT,
New England Farmer Office.

WHITE MULBERRY TREES WANTED.

The subscriber is desirous of purchasing 100,000 White Mulberry Trees, 3 years old, thrifty and of good size, for which $3 per 100 will be paid G. C. BARRETT.
Boston, July 29, 1835.

GRASS SEEDS.

30 Casks Clover Seeds—prime quality, 10 do. Timothy; 100 Bushels Red Top; 500 lbs. White Clover.
For sale by GEO. C. BARRETT.
New England Seed Store.

SILVER FIRS, &c.

WILLIAM MANN of Bangor, Me. will execute at short notice orders for Silver Firs, Evergreens, &c. well packed and in good order. april 8.

COMPLETE SET OF THE FARMER.

FOR sale at this office, one complete set of the New England Farmer comprising twelve volumes, neatly and well bound, and perfect. Price $3 25 per volume, *cash*. Feb. 18.

CHERRY STONES WANTED,

For which a liberal price will be paid. Apply at the office of the New Eng and Farmer. july 15.

SILK COCOONS WANTED.

The subscriber, encouraged by the late act of the Legislature to reel and throw American Silk, wishes to purchase at the Agricultural Warehouse in Boston, Silk Cocoons, and will pay $3 per bushel for the best, and in proportion for poorer ones. [m6] G. C. BARRETT.

FARM FOR SALE OR EXCHANGE.

An excellent Farm containing 70 acres, situated in Marlborough, Mass., with a house and barn thereon, for sale, or would be exchanged for property in the city of Boston. For terms and particulars inquire of G. C. BARRETT at this office, or N. B. PROCTOR, Esq. of said Marlborough. 6m

FARM WANTED.

A farm is wanted within 20 miles of Boston, for the cultivation of the Mulberry Tree, to consist of from 200 to 300 acres; to be high land and easy to cultivate. Any person wishing to sell such a farm, by forwarding a simple Bond, that the price may be known and relied upon, a Committee will examine the premises; as it is determined to purchase the best Farm offered this Autumn.

Address may be made to—
THO. WHITMARSH, Boston or Brookline.
WM. H. MONTAGUE, Boston,
JOSIAH DANIELS, do.
GEO. C. BARRETT do.
JOHN ASHTON, Boston or Roxbury.
Aug. 12. tf

HORSE RAKE.

Just received at the Agricultural Warehouse, a few first rate Revolving Horse Rakes.
July 8.

WHITE MULBERRY SEED, Growth of 1835.

Just received 50 lbs. of White Mulberry Seed growth of 1835, saved with much care from good, thrifty trees, expressly for the New England Seed Store. For sale by

GEORGE C. BARRETT.

N. B.—As the quantity will probably be inadequate for the demand the next season orders should be sent early.

July 29.

VALUABLE WORK ON FRUITS, VEGETABLES, SILK, &c.

Just published and for sale by GEO. C. BARRETT, THE NEW AMERICAN ORCHARDIST, or an account of the MOST VALUBLE VARIETIES OF FRUIT, of all climates, adapted to cultivation in the United States, with their history, modes of culture, management, uses, &c., and the CULTURE OF SILK; with an Appendix on VEGETABLES, ORNAMENTAL TREES and FLOWERS. By WILLIAM KENRICK.

A new edition, enlarged and improved. A chapter on "Climate" another chapter on Modern or Landscape Gardens, —also, a Practical Treatise on Mulberry Plantations, and the Culture of Silk, and the whole Class of Vegetables being now for the first time added and all that relates to them.

1 vol. 12mo. 420 pages elegantly bound. Price $1.

New England Farmer's Almanac For 1836.

Just published by JOHN ALLEN, & CO. Corner of Washington and School streets, up stairs, and by GEO. C. BARRETT at the Seed Store No 51 and 52, North Market Street, FESSENDEN'S NEW ENGLAND FARMER'S ALMANAC for 1836. For sale also by Booksellers, Shopkeepers, &c., generally.

This Almanac w ll be found one of the most interesting and amusing of the series, of which it composes No VIII. It consists of the usual astronomical calculations, humorous poetical sketches of the months; observa ions and directions relative to the employment of the Farmer, which will be found appropriate to each month in the circle of the seasons, "*Agriculture and Rural Economy*," including cuts and descriptions of many of the most useful implements employed in till ge. Valuable Recipes; Husbandry Honorable, a pithy piece of paramount poetry. The Splendors of the Setting Sun, a poetical effusion; Aphorisms; Eulogy on the *Art of Agriculture*; Calendar of Courts, Roads, Distances, &c, &c.

NEW WORK ON SILK.

In press, and will be published Sept. 1, 1835, THE AMERICAN SILK GROWER'S GUIDE, being the art of raising the mulberry and silk on a new system of successive crops in a season. By WM. KENRICK. The work will contain about eighty pages, well bound in cloth, and afforded to subscribers at 37½ cents.

GEORGE C. BARRETT,
New England Farmer Office.

SPLENDID BULBOUS ROOTS.

Just received at the New England Seed Store, an assortment of Bulbous Roots, comprising the finest varieties of Tulips, splendid variegated red, yellow and mixed, with the colors marked on each.

Hyacinths. Double and single, a fine assortment, with the colors marked on each. Also an assortment of fine double and single Hyacinths mixed without names.

Polyanthus Narcisus. Fragrant white with single cups, and extra sized roots.

We shall open in a few days a further supply of fine Bulbous Roots from Holland, among which will be bulbs of e.ery kind and color, which will complete a superb assortment.

SCILLA PERUVIANA, a rare bulb, from the Archipelago; produces a splendid flower may be grown in pots or in the garden, perfectly hardy. Prices—50 cts. 25 cts and 12½ cts according to size.

TULIPS, a large and splendid collection, growing in the Horticultural Gardens connec'ed with the New England Seed Store.

sep. 2.

PRICES OF COUNTRY PRODUCE.

CORRECTED WITH GREAT CARE, WEEKLY.

		FROM	
APPLES,	barrel	2 50	
BEANS, white,	bushel	1 75	2 00
BEEF, mess, (new)	barrel	13 00	13 50
Cargo, No. 1.	"	11	11 50
prime,	"	9 00	9 50
BEESWAX, (American)	pound	20	24
BUTTER inspected, No. 1,	"	16	20
CHEESE, new milk,	"	8	9
FEATHERS, northern, geese,	"	40	45
southern, geese,	"	35	39
FLAX, American,	"	9	10
FLAXSEED,	bushel	1 25	1 37
FLOUR, Genesee, cash	barrel	6 62	6 61
Baltimore, Howard street,	"	7 00	7 12
Baltimore, wharf,	"	6 75	6 87
Alexandria,	"	5 81	7 87
GRAIN, Corn, northern yellow	bushel		1 00
southern yellow	"	90	95
white,	"	81	90
Rye, northern, none.	"		
Barley,	"		
Oats, nor hern, (prime)	"	48	50
HAY, best English,	ton	22 00	25 00
eastern screwed,	"	16 00	17 00
hard pressed,	"	17 00	20 00
HONEY,	gallon	37	42
HOPS, 1st quality	pound	13	14
2d quality	"		
LARD, Boston, 1st sort,	"	11	12
southern, 1st sort,	"	9	10
LEATHER, slaughter, sole,	"	19	20
do. upper,	"	12	14
dry hide, sole,	"	19	21
do. upper,	"	18	20
Philadelphia, sole.	"	27	29
Baltimore, sole,	"	25	27
LIME, best sort,	cask	1 00	1 04
PORK, Mass. inspect. extra clear,	barrel	20 50	21 00
Navy, mess,	"	16 00	16 50
bone, middlings,	"		
SEEDS, Herd's Grass,	bushel	2 25	2 37
Red Top,	"	70	80
Red Clover, northern,	pound	9	10
White Dutch Honeysuckle,	"	25	03
SILK COCOONS, (American)	bushel	2 75	3 00
TALLOW, tried,	cwt.	7 50	8 00
WOOL, prime, or Saxony Fleeces,	pound	65	75
American, full blood, washed,	"	55	60
do. 3-4ths do.	"	50	55
do. 1-2 do.	"	42	50
do. 1-4 and common	"	45	47
Native washed	"	38	
Northern pulled. Pulled superfine,	"	55	
Northern pulled. 1st Lambs,	"	45	
Northern pulled. 2d do.	"	33	38
Northern pulled. 3d do,	"	25	30
Northern pulled. 1st Spinning.	"	43	50
Southern pulled wool is generally 5 cts. less per lb.			

PROVISION MARKET.

RETAIL PRICES.

HAMS, northern,	pound	10	11
southern, none.	"		
PORK, whole hogs,	"	6½	6½
POULTRY,	"		
BUTTER, (tub)	"	14	18
lump	"	24	28
EGGS,	dozen	16	18
POTATOES, new,	bushel	62	75
CIDER, none of consequence,	barrel	3 50	4 00